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EXAMINER
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BROWN, RUEBEN M

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**BEFORE THE BOARD OF PATENT APPEALS  
AND INTERFERENCES**

Application Number: 09/330,793  
Filing Date: June 11, 1999  
Appellant(s): BOYER ET AL.

**MAILED**

**OCT 04 2007**

**Technology Center 2600**

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Michael J. Chasan  
For Appellant

**EXAMINER'S ANSWER**

This is in response to the appeal brief filed 6/28/2007 appealing from the Office action  
mailed 6/29/2006.

**(1) Real Party in Interest**

A statement identifying by name the real party in interest is contained in the brief.

**(2) Related Appeals and Interferences**

The examiner is not aware of any related appeals, interferences, or judicial proceedings which will directly affect or be directly affected by or have a bearing on the Board's decision in the pending appeal.

**(3) Status of Claims**

The statement of the status of claims contained in the brief is correct.

**(4) Status of Amendments After Final**

The appellant's statement of the status of amendments after final rejection contained in the brief is correct.

**(5) Summary of Claimed Subject Matter**

The summary of claimed subject matter contained in the brief is correct.

**(6) Grounds of Rejection to be Reviewed on Appeal**

The appellant's statement of the grounds of rejection to be reviewed on appeal is correct.

**(7) Claims Appendix**

The copy of the appealed claims contained in the Appendix to the brief is correct.

**(8) Evidence Relied Upon**

5,986,650	ELLIS, et al	11-1999
US 2004/0049787	MAISSEL, et al	3-2004
5,758,257	HERZ, et al	5-1998

**(9) Grounds of Rejection**

The following ground(s) of rejection are applicable to the appealed claims:

***Claim Rejections - 35 USC § 103***

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

2. Claims 151-154, 156-159, 161-164 & 202-205 are rejected under 35 U.S.C. 103(a) as being unpatentable over Ellis, (U.S. Pat # 5,986,650), in view of Maissel, (U.S. PG PUB 2004/0049787 A1) and Herz, (U.S. Pat # 5,758,257).

Considering amended claims 151, 156 & 161, the interactive EPG system or method for aiding a user in identifying programs for viewing, comprising user equipment wherein an EPG is at least partially implemented is met by Ellis, (Fig 5A & Fig. 7). Ellis, col. 9, lines 1-10 & col. 12, lines 28-52, meets the claimed feature of the TV equipment displaying a current program, while also displaying the EPG.

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The additionally claimed feature of the TV equipment allowing the user to sequentially browse program listings for available programming by selectively displaying a display region reads on Ellis. The reference teaches that while in FLIP or BROWSE mode, that the user is enabled to sequence through a list of TV programs, col. 9, lines 31-35; col. 9, lines 61-65 & col. 12, lines 44-50.

The amended claimed feature of the display region being an overlay, and separately displaying each program listing is met by the discussion of Ellis, of the graphic overlay region 111, see col. 12, lines 37-60. Ellis goes on to teach that each program listing, i.e., each particular program is separately displayed on the screen, see Fig. 7-Fig. 8B; Fig. 11A-12A & col. 12, lines 44-67, which meets the claimed subject matter. As for the further claimed feature, 'wherein the display region is an overlay that is displayed while the current program is displayed on the first channel', Ellis teaches that "graphic overlay information that appears in the FLIP mode..., may or may not be the channel currently being viewed by the user", col. 12, lines 28-42, which reads on the further claimed feature.

Regarding the further amended claimed feature of the 'TV equipment configured to limit which program listings are displayed in the display region based only on various program attributes of the current TV program', Ellis discloses that while in FLIP mode, the viewer may look at the EPG according to favorite channel lists, col. 10, lines 35-39. Ellis also teaches that the list of programs shown to the user while in BROWSE/FLIP mode may be limited to a particular category of interest, such as Sport, for instance (col. 17, lines 8-20). However, this favorite

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channel or Category list does not explicitly require that the channels/programs be based only on program attributes of the current program. Nevertheless, Maissel teaches the well known technology of monitoring the programs/channels watched by customers and providing a listing of programs/channels likely to be of interest to the customer based upon a matching of the attributes of the viewed programs and the customer's viewer profile, Para [0031]. However, Maissel goes on to also teach that the intelligent agent 130 stores the characteristics of the current program in a viewer preference profile, and that even though the viewer preference profile may reflect as long as a year or more of viewing, the period of time for monitoring optionally may be set to only a few minutes, which clearly reads on the claimed, 'only the current program', see Para [0122]. Furthermore, Maissel discloses that the user may eliminate old information from the profile, which is additional evidence of the reference meeting the amended claimed feature, Para [0123].

It would have been obvious for one of ordinary skill in the art at the time the invention was made, to modify Ellis with the technique of providing listing of programs based on the attributes of the current program viewed, for the advantage of accurately estimating which programs the customer would have interest in, as taught by Maissel, Para [0122-0124].

The additionally claimed feature of allowing the user to adjust the relative importance of the various program attributes that are used to limit the displayed program listings reads on the discussion in Maissel that viewers may adjust various aspects of the preference profile, Para [0124-0132]. Regarding the further claimed feature, 'wherein the adjustment of the relative importance is performed by adjusting a weight factor for each program attribute', Maissel

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teaches that the viewer preference profile may contain information on preference strength, Para [0123], but does not explicitly teach 'adjusting a weight factor', as presently recited in the claim. Nevertheless Herz, which is in the same field of endeavor, discloses at least two instances of a customer adjusting weight factors of characteristics used in filtering programming. First, using the Rave Review technique, subscribers may adjust the preferred level (i.e., weighting) of particular characteristics/attributes of movies, col. 14, lines 20-50. Herz, also discusses in general, that a customer manually changing or modifying weights and values of certain TV programming characteristics, col. 46, lines 6-18. It would have been obvious for one of ordinary skill in the art at the time the invention was made, to modify the combination of Ellis & Maissel with the technique of adjusting the importance of TV programming characteristics by using weight factors, at least for the desirable benefit of giving parents/customers more control to limit the viewing of children and to assist in the presentation of programming that the customer would more like view; see Herz col. 46, lines 10-18.

Considering claims 152, 157, 162 & 203, the claimed subject reads on the disclosure of Maissel, Para [0122-0123].

Considering claims 153, 158, 163 & 204, the claimed subject matter reads on the subscriber selecting the desired program from the EPG, see Maissel, Para [0202-0204] & Fig. 9A-9C.



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Considering claims 154, 159, 164 & 205, the claimed neural network reads on system of Maissel, generating a viewer profile array in software, Para [0122] & [0132] and the calculation/adjustment of the agreement matrix in Herz, using various factors, (col. 30-col. 39).

Considering claim 202, the claimed machine-readable media for use in a system in which an interactive TV EPG is at least partially implemented wherein the media is encoded with machine-readable instructions for performing method steps that correspond with subject matter mentioned above in the rejection of claims 151, 156 & 161, are likewise rejected. Both Ellis (Fig. 1) & Maissel are directed to a computer driven system that discloses the use of machine-readable media to perform the features discussed above in the claims.

**(10) Response to Argument**

First of all, it is noted that appellant's brief does not make any arguments against the application of Ellis, with respect to the claims. Secondly it is noted that Ellis (col. 2, lines 5-55) & Maissel (Para 0073) are in the same field of endeavor with respect to displaying of program information to a customer, as well as customized lists of programming.

Appellant's main argument in the Brief, which is the first argument set forth on page 12, is that the combination of references fails to teach the claimed limitation of limiting the browse overlay to attributes "based only on various attributes of the current program".

On page 13, appellant states that Maissel discloses that the time period covered may be over a period of time, but argues that the reference is not based only on the attributes of a currently displayed program. On page 14, appellant argues that Maissel is not saying, "build a profile based only on a currently displayed program". Appellant goes on to assert on page 14, that the possibility that the range of time the viewer watches a current program may fall within the range of a 'few minutes' is mere happenstance, and limiting to a currently displayed program is not what is being taught by Maissel.

Examiner respectfully disagrees, and points out that Maissel is directed to providing a viewer with customized lists of programs, such that the customization is based at least in part, on the user's profile of viewing history, Para [0031]. The reference goes on to more specifically discuss that the customer's STB receives program schedule information attached to each program, which defines or characterizes the program. This program schedule information is used to develop a profile of the user with respect to the programs viewed, [0120], which then presents a filtered list of programs to the viewer, based on the profile.

First of all examiner points out that by the statement; "the possibility that the claimed limitation (i.e., currently displayed program) falls within the range, i.e., reads on Maissel", appellant admits that Maissel provides a functional equivalent of the claimed limitation. In other words, appellant admits that in at least one instance, Maissel meets the claimed subject matter. Appellant then characterizes this instance, as "happenstance". Examiner respectfully disagrees with this characterization.

It is pointed out that Maissel clearly discloses that the range of time to be considered in building the customer's profile, may include a range days, Para [0122- 0123] (i.e., "viewer preference profile is accumulated over an unlimited amount of time", which would not read on the claimed, 'only current program'. However, since Maissel does teach accumulating preference information over an extended period of time, and then alternatively teaches that the period may be set as low as a few minutes, it is then also clear that Maissel is aware of the benefits of a more narrow and limited time period of accumulating history. One of ordinary skill in the art readily

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recognizes that a time period of “Only a few minutes” would tend to capture what the user is more presently interested in viewing, as opposed to what the viewer generally likes/dislikes, over a long period of time.

In particular, in [0123] Maissel discloses that “typically” the viewer preference profile is accumulated over an unlimited amount of time. However, in the next sentence the reference states, “alternatively, old information may eliminated or the profile and may be reset upon the receipt of a signal from the TV network, emphasis added. Clearly then, Maissel is anticipating that a viewer’s profile will be started when the current TV program signal is received and thus be limited to collecting TV program schedule information of the current program, since the period of time may be set to as short as a few minutes, [0122]. It is not happenstance then, that a viewer preference profile would be limited to the current program.

Secondly, examiner also points out that Maissel states, “the viewer is preferably enabled to do on or more of the following; [0125]-**turn off or on the collection** of viewer preference profile information. This passage is especially poignant, since it is clear that a viewer can turn ON the profile collection at the beginning of the current program, and turn the profile collection procedure OFF before the current program ends, which would then clearly limit the collection period to the current program. Since the filtering is based on at least part of the preference profile, in that instance the filtering would be limited to only the current program, which meets the claimed subject matter.

As for appellants' argument that Maissel teaches away from the present invention, examiner respectfully disagrees. Both the present invention and Maissel are directed to presenting customized lists of programs, based on a customer's viewing history/profile. Examiner also disagrees with appellant's assertion that there is no motivation to combine Ellis with Maissel. As pointed out in the rejection, Ellis only provides limited discussion as to how the programs lists are customized. Whereas Maissel does teach that the program schedule information includes the attributes of a particular program, which is used to characterize the type of programs that the viewer might like. It would have been obvious for one of ordinary skill in the art the time the invention was made, to modify Ellis with teachings of Maissel, which teaches using intelligent agents to track and create the user profile, in order to more accurately filter the EPG.

Appellant's final argument is that Herz is not pertinent to the claims. On page 17, appellant argues that Herz & the present invention are not in the same field of endeavor. Examiner respectfully disagrees and points out that both Herz & the present invention are directed to presenting customized lists of programs to the viewer based, at least on their viewing history. To that end Herz, teaches generating an agreement matrix using at least a history of viewed programming, see col. 23, lines 1-30; col. 29, lines 31-67; col. 30, lines 1-45.

Appellant then admits on page 18, that "Herz delivers virtual channels of video programming to the user. These virtual channels take into account user adjustable weights of video program characteristics". However, appellant reasons in the following sentence, "such

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customized program delivery is not in any way related to the teachings of appellants' claimed invention- providing related **program listings** during a browse of TV channels based on a limiting factor". Examiner notes that Herz discloses that the virtual channels may be delivered to the customer in at least several ways; highlighted directly on the EPG or displayed to the customer's screen as recommended program selections, col. 23, lines 1-18; col. 45, lines 34-48. Then the customer may peruse, i.e., browse, through the list of recommended programs. Thus, notwithstanding appellant's argument to the contrary, Herz and the present are directly related in the same field of invention and both present customized lists of programs to the customer based on the viewing history/profile of the customer.

The point of appellants' argument that Herz restricts actual content provided to the user is not clear, since appellant mentions that the present invention filters an EPG, i.e., customizes/restricts programs displays in the EPG to only those that are related to the some limiting factor, which is also accomplished by Herz.

Appellant then goes on to page 19 and argues that since examiner pointed out that one of the purposes of Herz, is to give parents/customer s more control to limit viewing to the children, that providing parental control of custom generated channels is inapposite to the present invention. Again, examiner points out that the filtering process of the present invention achieves the same result, i.e., removing programs that don't fit some criteria, i.e., related to the current program. However, Herz is not at all limited to a parental control, this is merely one of its applications. But rather, Herz is generally concerned with presenting list of programs that have

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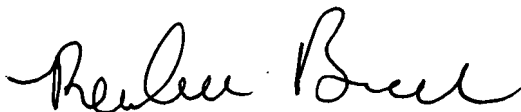
been filtered/customized/preference/recommended based at least in part on the viewing history of the customer. This generic application in Herz is not limited to a parental control, perse. The EPG customization, i.e. virtual channel creation in Herz is done to satisfy the viewing appetite of the customer and assist the customer by presenting programs that the customer is more likely to view.

**(11) Related Proceeding(s) Appendix**

No decision rendered by a court or the Board is identified by the examiner in the Related Appeals and Interferences section of this examiner's answer.

For the above reasons, it is believed that the rejections should be sustained.

Respectfully submitted,




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